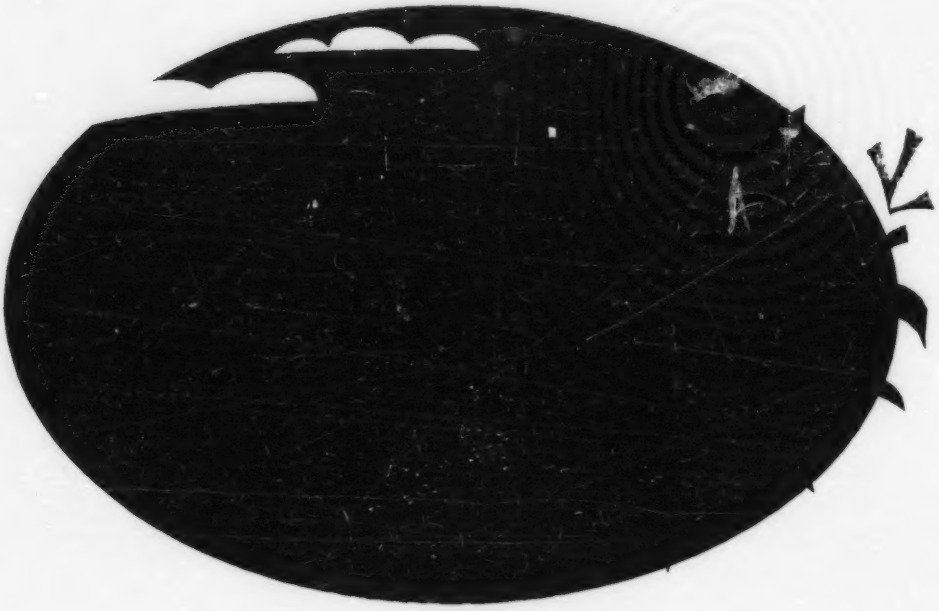
Manitoba
Agriculture

AGRICULTURAL OUTLOOK 1999

GRAINS AND OILSEEDS



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CROPS SUMMARY

1998/99 Highlights:

- US and Canadian yields were high, and a number of production records were reached, including Canadian canola, despite1998's weather extremes, including spring drought in western Canada's Palliser triangle and summer drought in Texas.
- Western Canadian canola plantings reached an estimated 13.45 million acres, with about 50% being newly modified varieties.
- Livestock prices are lower, encouraging a number of importers, including Japan and Russia, to shift from feedgrain imports to meat imports.
- To boost exports, the EU utilizes WTO-legal, export rebates up to US$40-60/tonne.
- To boost exports, the US uses concessional credit and aid, which include about 4 million tonnes of wheat exports.
- China has increased in importance as an economic and currency cornerstone in Asia, an importer (wheat, barley, canola), and exporter (corn), despite flooding and wheat aid requirements.
- Russia harvests the smallest wheat crop in 50 years, making mid-winter food aid critical.
- An elected Board of directors took office at the Canadian Wheat Board on December 31, 1998.
- Transportation disputes, settlements and inquiries: In December, 1998, the CWB filed a lawsuit for about $50 million in costs and damages for rail traffic disruption during the 1996/97 winter against the CP Railway. In April, 1998, an out-of settlement was reached between the CWB and the CN Railway.
- The Estey review of the Canadian transportation system was released at the end of December, 1998.

1999/2000 Highlights:

- Gradual economic improvements expected in Asia and in western economies.
- Wheat supplies show signs of a gradual tightening.
- Coarse grain supplies will remain high, despite US reductions.
- Continuing post-El Nino (La Nina) drought concerns, but reasonably good Canadian and US yields are assumed because of good subsoil moisture recharge and good US winter wheat crop establishment in most areas.
- US winter wheat plantings are down 7% or 3.1 million acres. US corn plantings are expected to drop about 1 million acres, with US soybeans increasing about 1 million.
- Some price improvements are expected for wheat (10-20%) and coarse grains (5-15%), with flat prices in oilseeds on average.
- Europe increased its set-aside to 10%, but carryovers and export competition will remain high through 1999/2000.
- World Trade Organization negotiations begin in 1999, and could continue for 4 to 6 years.

WHEAT

World wheat is in over-supply in 1998/99, as in 1997/98, but supplies are beginning to tighten and new-crop winter wheat plantings are cut back. Global production is down about 15 million tonnes (586 million in 1998/99,compared to 611 million in 1997/98). Of the exporters, only the European Union, the US, and Turkey have crops that are larger than the previous year. Canada, Australia and Argentina all have smaller, but good quality wheat crops. Argentina's crop was cut by drought to about 9.5 million tonnes (14.7 million in 1997/98), but much of its available exports are expected to go to Brazil, which has a 2.5 million tonne crop but a 6-6.5 million import requirement. The EU-15 has massive exportable supplies (more than 50 million tonnes, including intervention stocks, versus 38 million tonnes in 1997/98), most of it softer wheats. The US crop was large at 69.7 million tonnes (68.8 million in 1997/98, 62.2 in 1996/97).

Most forecasts assume that Asia's economic crisis will be short-lived, and that economic growth in most countries, including Canada, will be close to 2% in 1999. Assuming an Asian recovery, world wheat consumption will continue to increase, according to a number of major forecasting agencies. Consumption growth is expected to be small between 1998 and 1999, but from 1999 through into 2005, the growth is forecast at 8-12 million tonnes per year. The growth scenario in world wheat consumption may be: 1997-581 million tonnes, 1998-587, 1999-595, 2000-605, 2001-617, using a mid-point of the major forecasts that follow.

Wheat consumption forecasts: for 1997, between 577 (by the FAO) and 585.4 million tonnes (USDA), with 1998 at 585 (FAO) – 589.2 (OECD), with 1999 at 590.4 (USDA) – 600.2 (OECD), with year 2000 at 598.7 (USDA) – 612.1 (OECD), and 2001 at 609.7 (FAPRI) – 624.5 (OECD). The OECD is much more optimistic than FAPRI, the FAO, or USDA which is at or near the lower end. Europe, in particular, appears to be basing much of its production and compensation program decisions on the higher demand estimates.

World wheat trade in 1998/99 is expected to be the second lowest in a decade, dropping to 115 million tonnes, more than 4 million behind last year, nearly 11 million behind 1996/97, according to recent USDA estimates. Economic problems have caused reversals in the standard of living and import capacities of a number of countries in Asia, South America, Russia and elsewhere in eastern Europe. Russia harvested the smallest wheat crop in 50 years (27-28million in 1998 versus 44.2 million in 1997)! The world's largest wheat producer, China, had its productivity gains reversed by flooding in mid-1998 and dryness in late-1998 (110 million tonnes of wheat compared to123 million in 1997/98). China's wheat import requirements are generally estimated at about 2 million tonnes, although some European sources put it as high as 7 million (in addition to imports of barley and oilseeds)!

The USDA has relied heavily on aid shipments and/or concessional credit sales to boost US wheat exports in 1998/99, rather than on Export Enhancement Program (EEP) subsidies. At least 2.5 million tonnes of US wheat is to be made available for disaster assistance, including hurricane victims in Central America, flood victims in China, and to Russia, with much of it to be shipped in early 1999.

Canadian farmers planted 1.6 million acres less wheat in 1998 (26.8 million versus 28.4 million in 1997) but, yields were good and total production was slightly larger (24.4 million vs. 24.28 million tonnes). The acreage devoted to spring wheat dropped dramatically (to18.6 million acres from 22.3 million in 1997/98). In Durum, however, the 1997/98 premium over bread wheat

encouraged 1998's large increase in planting, particularly in Saskatchewan. The Durum crop reached record levels in 1998 (6.08 million tonnes vs 4.35 million in 1997). With a long, dry harvest period, most western Canadian wheat was of extremely high quality, including higher protein grades; no more than 1-2% of the western crop is estimated to have been feed quality.

Canadian wheat exports were slow in the early part of 1998/99, with the Canadian Wheat Board (CWB) indicating that it would ship more in 1999, when prices were expected to improve. To December 31, 1998, the CWB shipped 45% of its anticipated export program, 6 million tonnes of wheat and barley. Under an annual sales agreement, renewed in November, 1998, the CWB agreed to supply Japan with a minimum of 1.2 million tonnes of wheat during 1999, plus about 200,000 tonnes of Durum (and 200,000 tonnes of barley).

Wheat supplies show signs of tightening from spring, 1999, onward. Carryover is declining (123 million vs 136.6 million at the end of 1997/98), and upcoming crops are likely to be smaller. The Southern hemisphere's 1998/99 crops are still to be harvested, and in Australia, there were damaging rains across Queensland and northern New South Wales in October, followed by severe frost in western areas. For 1999/2000, fall planting appears to have been reduced. The European Union increased its set-aside to 10% for 1999/2000 (5% the previous few years). In addition, eastern Europe had cold, wet weather at fall planting time. US winter wheat plantings are down about 7%; unfortunately, even a total drop of 8% in total US production would only result in a 3% or 2.7 million tonne drop in total US wheat supplies, given recent high carryover projections.

In Canada, farmers planted only 967,200 acres of winter wheat last fall, a drop of nearly 3%, despite the good fall planting weather. Canadian spring wheat plantings in 1999 are expected to remain close to current levels, with some shifts away from Durum and increases in other spring wheats. Beginning August 1, 1999, the CWB intends to pay western Canadian producers based on the precise protein content of their wheat (on the basis of a tenth percentage point, rather than on a half percent at present). Winnipeg's Agriculture Canada research station and Monsanto expect to have the first Roundup Ready hard red spring varieties by about the year 2002; adoption of the new varieties will likely depend on acceptance by major export markets.

Price: A surplus of exportable supplies, reduced trade, and EU export subsidies are pressuring international wheat prices. US #2 Soft Red Winter wheat at the US east coast was about US$105/tonne, and dropping, in early to mid-December, down about US$20/tonne from a year ago. US hard wheat, DNS 14% at the US Pacific Northwest was about US$162, about $15/tonne less than a year ago. Durum prices dropped more sharply, with the US Minneapolis cash price at US$147-152 in late-1998, down $85-90/tonne, and about equal to 14% protein DNS. By late November, the CWB export asking price for #1 Durum had fallen to a discount to #1CW Red Spring, 13.5% protein. By early January, 1999, the CWB export Durum ask was C$244/tonne, $90 below a year ago, while 13.5% CWRS was $251/tonne, $20/T higher than January 1998.

The European Union is making use of sizeable export rebates (US$40-60/tonne) for wheat and barley. The US, in turn, has been making extensive use of about US$5.8 billion in GSM-102, as well as other concessional credit and aid, although resisting calls to use funds that have been budgeted for the Export Enhancement Program. The 1998/99 US wheat price is expected to average US$99/tonne or about C$148(US$2.60-2.80/bushel) to the US farmer, a 20% drop from US$124/tonne (C$176 or US$3.38/bushel in 1997/98).

The Canadian Wheat Board's recent "pool return outlooks" predict that 1998/99 payments to producers on high-grade wheat will return about $5/T more to producers than the 1997/98 final payments. Feed wheat supplies are extremely limited, and may be no more than 1-2% of the 1998 Canadian crop, providing the domestic market with premiums on any wheat that can be used for feed or ethanol. Off-Board feed wheat in Manitoba started the crop year at a base elevator bid of around $85, rising to $100/tonne or more, with at least $10-20 premiums for better qualities. With the December increases to the 1998/99 initials, there is less left for a final payment for feed wheat compared to higher grades. *(Please refer to the appendix for current CWB payment details.)* Chicago futures point to a 15% increase in US wheat prices between March and December 1999, reflecting the general expectation that wheat prices should begin a slow recovery beginning in the late spring. Overall improvements on wheat payments to the producer are expected to be modest, in the area of $10-$20/T in 1999/2000, compared to 1998/99.

COARSE GRAINS

Global coarse grain production is currently pegged at slightly lower than year-ago levels (882 million tonnes in 1998/99 vs. 886.5 million in 1977/98). Most of the major producers had smaller crops, with the major exception of huge increases in China (135-136 million vs. 114.7 million), and smaller increases in Brazil and Mexico. Despite the substantially lower prices for coarse or feed grains, the reductions in importer income levels and an import-substitution of meat are keeping feedgrain exports close to year-ago levels (at or above 87million tonnes). In addition, adequate supplies of lower or feed quality wheat from the EU have resulted in some shift to feeding wheat.

Feedgrain demand is related to livestock consumption and income. Southeast Asia's feedgrain demand is expected to hold fairly steady in 1998/99, with some individual shifts. Malaysia has maintained its poultry industry, and may increase imports slightly. The Philippines and Thailand have good crops and may decrease imports slightly. Indonesia's financial problems and an agreement with the International Monetary Fund to remove wheat and flour subsidies have it reducing wheat and corn imports, and exporting at least 1/2 million tonnes of corn. Japan is the largest importer of US corn, but its imports are expected to be the lowest since the mid-1980's because of a switch to meat imports. Under an annual sales agreement, renewed in November, 1998, the Canadian Wheat Board has agreed to supply Japan with 200,000 tonnes of barley.

In both Canada and the US, warm weather through to mid-December and some livestock herd liquidation is expected to have slowed feedgrain usage. Feed grain prices are low, on average, although locational supply tightness has maintained premiums on domestic usage in western Canada.

By the end of 1998/99, global coarse grain carryovers are expected to rise about 4 million tonnes over 1997/98's 135.0 million tonnes, and nearly 13 million tonnes over 1996/97's 126.6 million. Supplies will remain high and prices low. On the basis of expected production cuts, particularly in US corn, coarse grain prices are expected to improve an average of only about 5-15% in 1999/2000.

CORN

Global corn production, at about 597.4 million tonnes is more than 20 million tonnes above 1997/98! Global trade is expected to drop for the second year in a row, to just over 62 million tonnes, the lowest since 1993/94. The US harvested a 250 million tonne crop, its second largest and 5% above 1997, while China harvested a 125 million tonne crop. Domestic US demand is at record levels, due partly to growth in ethanol production, but domestic use and exports have been insufficient to draw down US surpluses. Since harvest, large amounts of US corn were in emergency storage, with a mandatory January 31 deadline for moving it. Potential competition from China is a major market concern and, although the USDA has been forecasting 4 million tonnes of exports for much of the past 2 years, China's 1997/98 exports eventually reached nearly 6.2 million tonnes.

Canadian grain corn production was a record 8.9 million tonnes in 1998/99 (7.6 million in 1997). The larger production, located mainly in Ontario and Quebec, has slowed eastern Canadian demand for western feedgrains and for US corn. Manitoba also harvested a large corn crop, with 95,000 acres of corn planted and about 216,000 tonnes harvested (152,400 in 1997). Manitoba also tends to import corn from the US (114,300 tonnes in 1997, 124,500 tonnes in 1996, and 213,400 tonnes in 1995).

In February 1998, US Agriculture Secretary Glickman announced what appears to be a major discovery for corn, a naturally-occurring, mutant corn gene that halves the phosphorous (P) in monogastric (hog and chicken) manure. The USDA expects the mutant will reduce livestock supplement costs (P-rich supplements include meat, fish, bone, flax and cottonseed meal, milk by-products and wheat bran), as well as providing one solution to excess phosphorous in manure. The new varieties should be available in 2000 or 2001.

Price: US corn prices are back to 1987/88 levels, after dropping sharply in the late summer of 1998 to about US$71-87/tonne (US$1.80-2.20/bushel) to the US farmer (compared to US$96 or $2.45/bushel in 1997/98, $1.94/bushel in 1987/88). In Chicago, the futures market currently reflects the expectation of improved prices over the coming year. US corn plantings are expected to drop at least one million acres in 1999, but, in the absence of weather problems, continuing high stock levels will prevent any rapid price recovery beyond about 5-15%.

BARLEY

World production of barley is the lowest in many years (nearly 139 million in 1998/99 vs.155 million tonnes in 1997/98). Most major producers had smaller crops, including Canada (12.7 million vs 13.5), the US (7.8 vs 8.2), Australia (5.4-5.5 vs 6.4), Eastern Europe (10.5 vs. 12.0), and China (3.5 vs 4). Russia had the largest losses, with its crop more than halved (9.5 vs 20.8). Turkey had a larger crop (7.8 vs 7.3), as did the EU (52.7 vs 52.5). European stocks will keep world barley carryover persistently high (15.2 million tonnes compared to 13.2 million at the end of 1997/98).

Malting barley supplies appear to be lower in 1998, but the loss is overshadowed by the size of EU supplies. EU malting barley quantities may be down in 1998, with quality good in more southerly areas, including France and Germany, but reduced in the north. Nearly 20% of the EU

barley crop tends to be malting; in 1998, this should provide 9.3-10.2 million tonnes for malting (2.6mln from the fall-planted, mainly 6-row crop, and 6.7-7.6 from the spring crop),compared to 10.2 million in 1997 (2.5 and 7.7). Both Canada and Australia's barley quality has been compromised and malting barley supplies are expected to be lower, in Canada's eastern prairies from locational occurrences of fusarium, and in Australia from severe weather down-grading.

World barley exports are expected to be about two million tonnes higher (15.2 vs 13.2 in 1997/98, 17.2 in 1996/97), although export shares have shifted dramatically. The European Union will more than double its exports (7.25 million vs. 3.5 in 1997/98 and 6.2 in 1996/97). Canada, the US, and Australia will export less. Canadian barley exports, which have been minimal in so far in 1998/99, are expected to drop to 1.5-1.6 million tonnes as a result of reduced supplies, low international prices, and a strong domestic demand for feed. Much of Canada's exports will be malting quality. The Canadian Wheat Board has committed to supply Japan with a targeted 200,000 tonnes of barley in the 1999 calendar year.

Saudi Arabia remains the major world importer of feed barley, and although imports dropped in 1997/98 to 3.25 million, they are expected to be back up to about 5 million tonnes this crop year (similar to the 5.5million in 1996/97). China is expected to import about 2 million tonnes, most of that feed barley from the EU, but there is concern that at least some of the "feed" will be used for malting. Japan's barley imports have dropped slowly, but steadily, from 1.75 million tonnes in 1994/95 to about 1.45 million in 1997/98 and about 1.4 million in 1998/99. The USDA is expecting 1998/99 US barley imports, virtually all from Canada, to drop to about 750,000 tonnes, compared to 800,000 tonnes or more over the past 3 years.

Price: Despite a lack of any substantial competition, Europe is making heavy, but WTO-legal, use of export subsidies on barley. Export rebates were 53.75 to 63.95 ECU/tonne in the late fall, about equal to the export value (1.18-1.2ECU=US$1). The EU fob price was about US$60-65 in August, US$73 in the fall.

The EU subsidies have driven international barley prices down to the lowest levels in about 10 years. US west coast cash barley, which tends to be higher-valued, was running at about US$96/tonne (US$2.10) in December, 20% under a year ago. Barley prices to the US producer are also averaging 18%-20% below 1997/98. In contrast, the very low level of exports or deliveries and the low Canadian dollar, gives the appearance of improvements in Canadian prices, but returns are low. CWB feed barley payments to the Manitoba producer are currently expected to total nearly $85/tonne, basis Winnipeg (compared to $65.53 in 1997/98, $94.71 in 1996/97). Farm returns on malting barley, however, will be the lowest since 1993/94 with 6-row SSCW at about $119.50 ($141.80 in 1997/98, $145.47 for 1996/97), basis Winnipeg. *(Please refer to the appendix for current CWB payment details.)* Continuing high levels of EU supplies will keep 1999/2000 prices low and could prevent improvements beyond 5-15%.

OATS

Canada's 1998 oat crop was larger (3.96 million tonnes vs. 3.48 million in 1997). Manitoba's crop alone was up 40% to just over one million tonnes. Western Canadian oat processing capacity has increased dramatically. The capacity of the Can-Oat Milling plant at Portage la Prairie was doubled to about 34,000 tonnes/year (250,000 pounds/day) by July, 1998.

Can-Oat's Saskatoon plant, with a capacity of about 102,000 tonnes/year (750,000 pound/day) opened in December, 1997. Despite processing capacity increases, the total reported commercial domestic use appears to be lagging slightly behind a year-ago, along with exports during August/December. As a result, Canadian carryovers may be somewhat higher by July 31, 1999.

Canada is the world's largest oat exporter, and in 1998/99, could account for about 1.5 million tonnes out of the world total export of 1.94 million. The EU will export about 250,000 tonnes. (In 1997/98, Canada exported 1.25 million of the 2.24 million total, compared to 775,000 from the EU.) The US, on the other hand, accounts for all but about 500,000 tonnes of the world's imports. Small amounts are imported by other western European countries (80-150,000 tonnes), by Japan (about 90,000 tonnes/year), and by Russia and a number of South American countries.

The US crop has been slightly larger over the past two crop years (2.47 million tonnes in 1998 and 2.56 million in 1997) and imports are down. US imports of high-quality food and pony oats are expected to drop to1.5 million tonnes in 1998/99 (1.7-1.9 million in 4 of the past 6 years). The annual US use of oats for food, mainly in breakfast cereals, appears to have remained fairly constant over recent years, at around 1.4 million tonnes. US feed use of oats, however, has dropped to 2.5-2.6 million tonnes. US carryover stock levels have rebounded in the last 2 years and are expected to remain high (about 1.04 million in 1998/99, 1.07 million for 1997/98, and 962-968,000 tonnes in 1995/96 and 1996/97).

The EU continues to export Scandinavian oats to the US, in competition with Canadian oats, with the help of export rebates or subsidies. Northern Europe's 1998 crops were damaged by a cold and wet summer, both in quantity and quality, and Sweden's oat crop is estimated at 5.2-5.5 million tonnes (6.1 is"normal"). Despite the losses, the EU authorized 254,000 tonnes of oat exports in the fall, using subsidies of about US$70/tonne (US$1.05/bushel).

Price: In comparison to recent years, the larger domestic US supply has reduced both US demand and the premium paid for milling oats in the early part of 1998/99. US cash oat prices were US$85/tonne (US$1.31) at Minneapolis in December, 22% or US$23/tonne below a year ago. US farm prices are expected to average US$71.30-77.80/tonne (US$1.10-1.20/bushel), down 28% from 1997/98 (US$103.75 or $1.60/bushel). Local new-crop oats (up to $1.90-2/bu for #1) have shown some strength. Manitoba's feed oat prices have been in the C$85-90/tonne recently. Oat prices in 1999/2000 should improve more than other coarse grains, potentially 10-20%, which unfortunately leaves it at still-low levels. The resumption of a milling premium will require a draw-down in US and competitor high-quality carryovers.

RYE:

The Canadian rye harvest jumped 24% to 398,100 tonnes in 1998/99, compared to a fairly static crop of close to 300,000 tonnes over the past few years. Manitoba's 1998 rye crop totalled 106,700 tonnes (62,200 in 1997, 66,000 in 1996). Despite the good weather in the fall, plantings for 1999/2000 were down about 15% with 514,900 acres planted (605,400 planted for 1997/98). Manitoba's fall rye plantings are estimated at 85,000 acres (120,000 acres for 1997/98).

Canada's rye exports are generally split between the US and Japan, with small amounts to South Korea. Exports and domestic consumption are moving well, but are limited by available supplies. Canadian carryovers have tended to be virtually non-existent since 1996/97, so

1999/2000 supplies will again be limited.

US production of rye for 1998/99 increased to about 326,000 tonnes (226,000 tonnes in 1997, 229,000 in 1996, 256,000 in 1995). The US uses about 210-240,000 tonnes for food and beverage industries, and much of the remaining supply (125,000-185,000 tonnes) for feed. Approximately one-third of US domestic rye requirements have been met with imports from Canada and/or Scandinavia. US imports are expected to decline to about 100-102,000 tonnes because of the larger crop, down from imports in the previous two years (141,000 in 1997/98,110,000 in 1996/97). US rye plantings for 1999/2000 harvest have increased by 1% (to 1.59 million acres planted last fall, vs 1.57 million in 1997,and 1.4 million in 1996).

Rye's major food use is in whole-grain products or in bread in northern Europe. The former Soviet Union was a major market for Canadian rye in the past. Current European demand is met almost entirely by European production. Late-1998 announcements of EU food aid to Russia included rye.

In North America, the rye content in the more common light rye breads is about 20 pounds of rye for 340 pounds of bread (one cup rye to 17 cups dough). There is little Canadian production of dark rye bread or of consumer-packaged fine or coarse-milled rye flour, partly because of the effect of rye's oil content and flavour on the milling process, although niche market domestic demand appears to be increasing. Rye contains substantial amounts of soluble fibre. Rye's flavour is required in rye whiskey manufacturing, although rye comprises only about 5-6% of the grain mix or mash. Clean rye as a feed tends to be used primarily in mature hog rations.

Rye may have some benefits in reducing pesticide use and in biological pest control. Fall-planted rye can be used as a minimum tillage and nurse or ground-cover crop. Agriculture Canada research in Ontario has shown that when processing tomatoes are planted into rye residue in the spring, the rye acts as a thermal blanket, providing protection from late spring frosts, summer heat, and wind-erosion on sandy soils, and preventing some nitrogen leaching. The rye also provides a habitat for ground beetles that are predators of the Colorado potato beetle, and has as a scent that apparently confuses the potato beetle's tomato-eating habits.

Price: Although Canadian rye supplies are limited, prices are pressured by the lower prices in the US and for other coarse grains. Local Manitoba rye prices have tended to vary dramatically, with rye destined mainly for the US milling market (with good falling numbers) often priced double the value of other sales of #1 rye. In 1998/99, however, there appear to have been few milling premiums offered. Local prices have been mainly at feed price levels of around $75/tonne (less than $2/bushel) for much of the summer and fall, slipping recently to about $55/tonne (compared to about $80/tonne or $2/bu for feed, and double that or $3.50-$4/bushel for milling quality during 1997/98). (Rye has not been traded on the Winnipeg Exchange since 1995.) Rye prices in 1999/2000 should improve in the area of 5-15% along with other feed grains. The resumption of a milling premium will require a draw-down in US and competitor high-quality carryovers.

OILSEEDS

International oilseed supplies continued to increase in size in 1998/99, with production at a record 288 tonnes, according to USDA estimates (286.8 million in 1997/98). The 1998 US soybean crop is put at 75.2 million tonnes, a 4.5% increase from 1997/98, and US year-end carryover is expected to nearly double to 10.2 million tonnes. Global soybean production, however, may be as much as 2 million tonnes lower than 1997/98, depending on the development of South American crops (156 million in 1997/98, 132 in 1996/97). There are larger crops in Canada and Argentina. Rainfall in early to mid-December improved the potential for Brazil's March/April harvest. World rapeseed production is up to 36-37 million tonnes (34.3 million in 1997/98). Cottonseed is down 32.9 million (34.7). Sunseed production is put at 26.2 million tonnes (23.9), with a large Canadian crop, and smaller crops in Russia and the Ukraine.

Vegetable oil prices have slipped from late-fall values, and from a year ago, but have benefiting through much of 1998/99 from the tight supplies of palm oil and the continuing strong consumer demand for edible oils, particularly from India. At the end of December, 1998, the cash price of soyoil in Rotterdam had dropped to US$564/tonne ($622 in December 1997); rapeoil was $576 ($629); and sunoil was $625 (687). In contrast, linoil was US$665 ($610). Crude palmoil, with supplies still tight from weather and man-made environmental problems, was US$650 ($566). Protein soymeal prices in Rotterdam dropped 38-44% over the year!

CANOLA

Global rapeseed/canola production is up about 6.5% in 1998/99. Rapeseed supplies are tight in China (which had an estimated 8.3 million tonne crop vs. 9.6 million in 1997/98) and in India (6.2 vs. 5.9 in 1997/98 and 6.9 in 1996/97). Canada, Australia, and the EU have larger supplies. Australia's 1998 crop doubled to 1.7 million tonnes (a 6-fold increase since 1994/95), and crushing capacities have been increased.

The EU produced approximately 35.9 million tonnes in 1998/99 (33.25 million in 1997/98), and indications are for a similar or slightly larger crop in 1999. Europe's imports of Canadian canola have essentially been blocked by France for the past 2 years, and a further 2-year moratorium has been proclaimed on all genetically modified (GMO) rapeseeds. (France has also failed to adopt legislation allowing the use of Novartis Bt corn.) The EU has initiated the first steps toward potential legal action against France, giving France until the end of December, 1998, to respond. France, however, still has the option of adopting the necessary legislation and then stalling its implementation (under Article 16).

The US harvested 720,600 tonnes of canola in 1998 (355,100 tonnes in 1997) and 2,900 tonnes (790 tonnes) of high-erucic rapeseed. Acreage has nearly doubled in each of the last two years, with northern US farmers planting about 1.127 million acres of canola and 4800 acres of rapeseed in 1998, much of that with Canadian seed. About 770,000 acres of the 1998 plantings were within proximity of the N. Dakota Velva crusher, but that should leave the crusher half-supplied and in need of Canadian imports by mid-winter. The US is apparently exporting canola to Europe in 1998/99! (A number of seed treatments, and in particular, "Lindane", a seed storage treatment, are not allowed on exports to the US after June 1, 1998 or to Europe.)

Canadian canola production reached a record 7.59 million tonnes, from a record 13.5 million seeded acres. Exports have moved well, including a mid-December report of sales to China that brought estimated purchases up to about 1.4 million tonnes, rivaling Japan as Canada's major export canola market. Canada's domestic processing was up about 13% during August/December, 1998, and oil and meal exports, particularly to the US, are expected to be higher. Canadian canola oil and meal in 1998/99. Canadian farmers have shifted rapidly to the biotech canola varieties, which represented an estimated 25% of the crop in 1997, 50% of the crop in 1998, with an expected rise to 66–75% in 1999. The owners of Manitoba's third crushing plant at Ste. Agathe have announced refinancing and additional European support, and intentions to open the plant soon under Vegican Oil Inc.("Vegican").

Price: Tight world supplies of vegetable oils, a weak Canadian dollar, and a high level of exports have helped support canola prices. At the local Manitoba elevator, prices had slipped to $320-330/tonne in August, 1998 ($7.30/bushel and well below the $8/bushel breakeven); however, many Manitoba producers had pre-priced a portion of their crop at higher, early-1998 levels, which helped to hold post-harvest receipts up. At the start of January, 1999, canola at the local elevator was around $359/tonne ($8.14/bushel), $18/tonne more than a year-ago. Canola meal for feed use, however, is down $50/tonne in local Manitoba markets, and there has been some decline in canola crush margins recently. Futures prices for canola are showing a 5% price inversion or decline from January 1999 to January 2000, despite a corresponding 5% improvement suggested in Chicago soybean futures.

FLAXSEED

World flaxseed production is larger in 1998, with both area and yields higher, according to European estimates (2.78 million tonnes, compared to 2.39million in 1997/98, 2.24 million in 1996/97). Argentina's production, to be harvested in December/98 and January/99 is so far expected to be similar to last year's 80,000 tonnes (100,000 acres). China is the world's major producer, and produced more (a 420,000 tonne crop vs. 400,000 in 1997), with India's lower at 300,000 tonnes (320,000 tonnes).

The 1998 US flaxseed harvest was 94,190 tonnes (61,470 in 1997, 40,700 in 1996). Plantings more than doubled in 1998 (to 336,000 acres, compared to 151,000 in 1997). About 84% of the US crop is in North Dakota. US imports of flaxseed from Canada totaled 111,100 tonnes in 1997/98 (145,700 in 1996/97), but could be lower in 1998/99.

Europe has been encouraging flaxseed planting increases through the CAP farm program for many years, but the growth has been fairly slow until now (about 260,000 acres 1998, 220,000 in 1997, 200,000 in 1996). A 270,000 tonne crop was harvested in 1998 (230,000 tonnes in 1997, and 200,000 tonnes in 1996). Eastern Europe and former USSR countries produced another 110,000 tonnes (90,000 tonnes in 1997). Germany, the Netherlands, the UK and Belgium have all increased their crushing of flax or linseed. European meal demand appears to have increased unexpected late in the year.

Canada's flax production jumped 24% in 1998, to 1.1 million tonnes (895,400 in 1997). Manitoba's production was up 4% in 1998, with 368,300 tonnes (355,600 in 1997). Flaxseed exports were up 14% above year-ago levels in the August/December period. By far, the largest

importer so far in 1998/99, as in 1997/98, has been the EU, with Japan and China purchasing some, and a bit to Korea, but with US buying less than half the year-ago level. Edible types of flaxseed now produced in Canada are not necessarily reported in all the official statistics; however, European sources state that virtually all the edibles (Solin) are being exported and crushed in Europe.

Price: Flaxseed prices have been strong but widely volatile through much of 1998/99. In August, the bid price at the Manitoba elevator was around $267/tonne, but by early January it was back around $321/tonne, about $12 below a year-ago. In the futures market in early January, March canola was just under $340, compared to around $355 a year ago. The low value of the Canadian currency has provided a relative bargain to European buyers. In terms of the German currency (the DM), Canadian flaxseed prices during the summer were at their lowest levels since 1995, and despite the price improvements, they remain at 95/96 levels, which may account for some of the strong demand in the autumn. Despite the larger flaxseed supplies, linoil in Rotterdam was US$665 in late December (compared to $610 the previous year). It is not clear if linseed and linoil usage is "current" in Europe, or if there has been some "stocking-up", particularly in the seed. Even if inventories are increasing, it may be profitable for Europe to resume buying in the spring (for Thunder Bay shipment), in the expectation of a Canadian dollar improvement. With the continuing profitability of flaxseed relative to cereals, producers worldwide are likely to maintain a high level of flaxseed production in 1999/2000, and prices of oilseed flax could weaken back to the $300 level or less at the elevator by spring.

SITUATION AND OUTLOOK FOR SPECIAL CROPS

FIELD PEAS

Post-El Nino weather and tropical storms and hurricanes cut pulse crop production outside N. America, forcing some demand, particularly in the middle East to shift from chick peas to yellow peas. Turkey has a reduced chick pea crop and will have only 100,000T of exportable surplus (150,000 last year). There are two main types of chick peas, Kabuli (or garbanzo beans) and Desi. Australia grows desi type chick peas for export to India; while good field and chick pea crops had been expected earlier, it appears the October/November frosts that hit Australia's wheat crop, along with disease (aschochyta) may have reduced pulse production as well. Pea crops in southern Europe (in France and in the Ukraine) are expected to have been larger, with some reductions in the north. Europe is a major customer of Canadian peas, and demand for food peas is expected to continue. Europe, however, has large supplies of feed wheat that are competing with feed peas, but in addition, the Netherlands, a major feed compounder and user, had its hog herd reduced (hog colera 1997/98, etc.).

North America has more than ample supplies of field peas, at a time when food demand for peas has been slow. Peas are expected to benefit from damage to foreign bean and chick pea crops, however, and carryovers should be reasonably low. The US dry pea crop was slightly above '97with 323,400acres planted, and an 5.858mln cwt crop. Western Canada has a record '98 dry pea crop. Acreage was a record 2.68 million (2.097mln in '97, 1.345mln in '96), and the crop was 30% larger at 2.29mln tonnes (1.762mln in '97, 1.173mln in '96). Manitoba's dry pea crop was up about 25% to 223,200T (178,300T in '97). Manitoba's own hog production has provided an outlet for locally-grown peas, with some going directly off-farm into hog feeding, providing some offset to limited feed barley and wheat supplies.

Manitoba's Portage la Prairie pea processing plant reopened in the spring of 1997; however, this is not expected to mean additional delivery opportunity for Manitoba pea producers. A Parrish and Heimbecker Ltd. (P&H) processing plant in Saskatoon is expected to supply the Portage plant with 5,000 tonnes of pea starch and protein products per year for refining. (P&H purchased the former Woodstone Technologies plant for $750,000, effective April 1, 1997 after Woodstone officially declared bankruptcy on January 17, 1997.)

Newer, higher-yielding varieties of peas are becoming available in Manitoba as well as in the northern US. There are also new innoculant formulations, new methods of application and, for larger-seeded varieties, there are higher seeding rates. Many new Manitoba varieties have test-yielded between 110-115% of the standard variety, Express. Some, like Carneval (a semi-leafless), Alfetta and Eiffel, became available and were added to "Seed Manitoba 97". Seed treatments for seeding diseases and seed rot are generally recommended. Upcoming varieties should be more resistant to powdery mildew.

Price: Pea prices have weakened along with feedgrains and, more than ever, should be considered in feed rations, potentially with canola or canolameal in substitution for soymeal! In the Winnipeg Commodity Exchange pea contract, which is based on European market demand, there has been some recent recovery above US$175/T. The WCE contract has not shown a similar degree of price rise or decline as the US cash or dealer price for whole yellow peas. Europe's pea crops are harvested in July, so Manitoba producers' spring sales opportunities into

this market tend to focus on early May, with shipment through Thunder Bay, and with prices related to European new-crop prospects.

US cash pea prices over the past year or so appear to have been more influenced by Chicago soybean and soymeal prices than in earlier periods (a collapse to a feed or floor value). Large-scale USDA (CCC) purchases for foreign food aid have been slow since the high prices for peas and lentils during 1996/97's short crop. The CCC has a longer-run policy objective of shifting to aid through foreign credit financing and investments, rather than through commodity aid shipments.

The mid to late November, 1998, price to the Manitoba producer for #1Canada yellow peas was in the $128.60-156/tonne or $3.50-4.25 range (compared to $167-239/T or $4.55-6.50/bushel a year ago, $211-245/T or $5.75-6.67 2 years ago). Green peas have been $147-175/tonne or $4.00-4.75 for #1, ($224-294/T or $6.10-8.00 a year ago, $235-275/T or $6.40-7.50 2 years ago). The very limited supply of Maple peas has been about $184 or $5/bushel (down from $419/T or $11.40 in 1997, and from $334/T or $9.10/bu in1996). Feed peas have been mostly in $110-121 or $3-3.30/bushel (compared to $158-174/T or $4.29-4.75/bu. last November, and $184-211/T or $5-5.75 in 1996). Specific varieties of the small yellows were around large yellow prices.

The prospect of feedgrains continuing at fairly low price levels, particularly for corn in 1998/99 and 1999/2000 may be a disincentive to pea producers, particularly when aiming for food market prices; however, as pea yield potential increases, per acre returns should be considered. Pea plantings in 1999 are expected to be flat or down slightly, which should provide for pea prices to be slightly above current levels.

BEANS, DRY

North American dry bean markets in both 1998/99 and 1997/98 rallied sharply in the October to December period, and a rush of exports has taken much of the available supplies. Hurricane disaster in Central America increased the need for aid shipments, but much of the late-year demand was from Mexico, particularly for coloured beans, where there was excessive rainfall last summer in north-western areas. (Moisture improvements, however, were expected to be beneficial to Mexico's southern bean-growing areas and to subsequent northern crops.) The USDA credits a generous and rising NAFTA tariff-rate quota with an expanding bean market into Mexico and is looking for increased production and exports in coming years. Canada was not able to obtain an agreement to increase its regular quotas. Mexico, however, has the option of emergency, over-quota purchases, which Canada can fill.

Prospects for Canadian and US bean prices and exports have improved since the start of the crop year and larger supplies have been meeting reasonably strong prices. The US bean harvested area was higher at 1.906mln acres (1.72mln in '97), but yields were low and the 1998 crop is pegged at 1.409mln tonnes (1.323mln tonnes in '97, 1.268mln in '96). The Canadian bean crop totalled 185,100 tonnes (up from the 160,500 tonnes in 1997 and the disastrous 133,000 tonne crop of 1996). Manitoba's 1998 bean crop was up 51% from 1997, totalling 36,300 tonnes of white pea or navy beans (31,800 in 1997,19,100 tonnes in 1996) plus 35,800 tonnes of coloured beans (15,900, 19,500, and 22,200 tonnes). Coloured beans tend to go into Latin America, with Pintos and Reds often into the Mexican market, and with Navys and Browns to Europe.

Price: In Manitoba, the mid to late-November price to the producer for white pea or Navy

beans had jumped to 26-29 cents/pound (17-17.5 cents/pound a year ago, 25-28 cents in November 1996). Prices on coloured beans are also higher, with Brown beans about 29 cents (19 cents a year ago, 33-35 2 years ago), Pintos at 23.3-27 cents (20-24 and 25-28). Blacks jumped from to 39-45 cents (they had gone from 19 cents at harvest 1997 to 23-30 cents by mid-November, and were 26-27 in 1996). There are few Pinks in Manitoba in 1997, with a producer price of about 29-30 cents in November (25-28 and 35-36). White, light or dark red kidney beans, small red Mexican beans, and cranberry beans ranged from 34-39 for Cranberries, 40-42 for kidneys (27-28 and 32-45 cents last year). Manitoba's coloured beans tend to be about 60-65% Pintos, 20% Blacks, 5-10% Pinks and about 5% small Reds and others.

Weather had been mainly responsible for the draw-down in North American bean supplies. The high prices are likely to encourage increased production in 1999, and prices could easily fall back to more normal levels if crop conditions are good, closer to the 20 cent/pound level. In an unusually early contract offer, a portion of 1999 production could have been priced in November in Manitoba around the 30 cent level for most coloureds, 24-26 cent for white pea beans.

BUCKWHEAT:

Canada, the US, China, and eastern Europe are major producers of buckwheat, with China historically accounting for 38% and the former Soviet Union 54%. Japan is the major world market for buckwheat, buying only new-crop and virtually the entire world trade of about 300,000 tonnes for use in fresh soba noodles. Japan buys from all the major competitors, including China, Canada, the US, Brazil, and France (with the exception, perhaps, of eastern Europe). China is the major exporter, and buyers indicate it has become more competitive (price and/or quality) in recent years, but China's buckwheat research program apparently terminated in 1995. France generally has an import demand for use in buckwheat crepes (in Brittany), but the import source is generally Brazil.

Manitoba grew a 10,900 tonne crop in 1998 (9,800 tonnes in 1997 and 15,200 in 1996). Much of the balance of Canadian buckwheat production is in Quebec, bringing the total Canadian crop to 14,800 tonnes (15,500 tonnes in 1997, (22,200 tonnes in 1996). Canada exported 13,860 tonnes of buckwheat in the calendar year 1997 (7,936 tonnes in 1996), with about 8,718 tonnes to Japan, 2,290 tonnes to the US and 1,722 tonnes to the Netherlands.

The US buckwheat area generally totals 30-40,000 acres. The Min-Dak Growers Ltd. Contracts for about 30,000 acres of buckwheat in North and South Dakota, Minnesota and Montana. In August, 1997, the Minn-Dak Growers Ltd, of Grand Forks, N.D. officially opened a mill in Grand Forks specifically for buckwheat milling. The products, light and dark buckwheat flours, groats, and grits, are destined for the North American market. Minn-Dak's Dickinson, N.D. plant cleans raw buckwheat for export to Japan. (Minn-Dak also processes birdseed, using oil sunseed, safflower, and millet, at its Dickinson plant, processes confectionery sunseed at Donaldson, Minn. and Drayton N.D., and mills and deheats mustard at its Grand Forks plant.) Buckwheat, which is popular with deer, may also have marketing potential in winter deer feeding programs.

Over the past several years, Canada and the US have been importing pillows made of buckwheat hulls, mainly from Japan. As a result, there has been a surge in the local interest in buckwheat hulls (2-sides attached) for pillow production. In much of the milling processes, however, the hulls may be rendered unusable by being either spit apart totally or ground with the

fruit. The primary supplier of clean, weed-free, good-quality hulls to Canada and the US has been Russia. China also exports buckwheat hulls to the US, some of which has been imported into Canada in pillows. To meet the demand, some of Manitoba's bulk food stores began to carry the hulls in late 1997. The Minnesota growers co-op and the Ag. Utilization Research Institute at Crookston have been testing dehulling processes. A Minnesota processor's sales value of approximately US$0.60/pound for hulls was reported in the early spring, 1998.

Buckwheat contains high-quality protein or lysine, contains no gluten, and apparently has pharmaceutical and nutraceutical product potential, including beneficial effects on cholesterol. It may be used in groat form for breakfast cereals, ground for crepes, or mixed with wheat flour in bread, pancakes or noodles.

The US Buckwheat Growers Association of Central Minnesota and their newly formed growers' co-op are also focussing on buckwheat as a rotation crop or a conservation crop for CRP land. As a cost-effective alternative to chemicals, it is being used alone or followed by other crops (e.g. rye, vetch), as a cover crop, for smothering weeds (fairly competitive with quack grass), or as a green manure crop (also in rotation with organic soybeans). Buckwheat can potentially add as much of 3000 pounds of organic matter per acre. It is a short-season crop but not particularly frost-tolerant, and is not yet eligible for crop insurance in the US. A number of buckwheat research studies are ongoing in the US (Cornell University, N.Y, and Northern Crops Institute, Fargo), with variety research for frost-hardiness, yields, etc. in Morden, Manitoba. US yields of buckwheat are generally 800-1000 pounds/acre (17-21 bushels/acre), but they are hoping to add another 200 pounds/acre through research.

Price: Prices to the Manitoba producer, post-1997-harvest, were in the $7.50-9/bushel for top-quality ($6-7/bushel area a year ago, with spring contracts as much as $7.50), with #2 down to $6-7.50 ($5.50), and with birdfeed around $6.75 for birdfeed ($7). China continues to hold much of the lucrative Japanese market, holding world prices down. The increase in North American demand for milled buckwheat is expected to hold prices around the $7-8 benchmark into 1999/2000.

CANARYSEED

The Canadian canaryseed situation has been one of lingering oversupply over the past few years, but canaryseed has a major role as a rotation crop in Saskatchewan. The 1998 Canadian crop totalled 235,300 tonnes (115,000 tonnes in 1997, 284,600 in 1996). Manitoba's 1998 crop totalled 24,900 (9,200 tonnes in 1997, 33,700 in 1996, 12,200 in 1995). Saskatchewan's reductions were not quite as drastic as Manitoba's. Canada exported a total of 134,138 tonnes of canaryseed during 1997 (104,082 tonnes in 1996), with the largest buyers being Belgium (33,585 tonnes), Mexico (19,328), Brazil (18,181), and the US (15,309), and with large amounts also going to Spain, the Netherlands and other EU countries.

Western Canadian and Manitoba canaryseed prices were generally in the 11-12 cent/pound area (14-16 cents a year ago, 12-15 cents in November 1996). Prices for 1999/2000 are likely to remain flat unless further drawdowns in production and carryovers occur, particularly in Saskatchewan.

Mexico's 20% tariff on imports of Canadian canaryseed expired January 1, 1998. Canadian canaryseed exports to Mexico grew from a value of $4 million in 1992 to $13 million in 1995, and should continue to grow.

FABABEANS

The 1998 Manitoba fababean crop is estimated at 10,300 tonnes (3,400 tonnes in 1997 and 5,400 tonnes in 1996). Much of Manitoba's fabas are used for feeding of feed mills, particularly if crop quality suffers, as in 1997. Mid to late-November prices for fababeans were in the 9-10 cent/pound area (a year ago: 12 cents for good quality #2, with a good #3 around 9 cents, and feed fabas priced 7-8 cent). Faba prices are likely to remain close to the 10 cent ($220/T) area in 1999/2000.

LENTILS

The 1998 US lentil crop is down to 85,140 tonnes, a drop of 21.5% from 1997 (108,455 in 1997, 60,464 in 1996). Plentiful supplies, apparent stock-piling and slow importing by European buyers over recent years had halved 1997/98 prices, which attracted buyers, including food aid and helped to draw down supplies and discourage 1998 planting. Recent disasters have also helped to increase lentil demand.

Canadian lentil supplies continue to be adequate, despite planting reductions in Manitoba. In Manitoba, lentil production remains at low levels (5,900 tonnes in 1998, 5,300 in 1997, 21,000 in 1996). Saskatchewan's production was maintained, so the Canadian crop was higher at 479,700 tonnes (378,700 in 1997, 402,500 in 1996, 431,900 in 1995). Saskatchewan's carryovers and production tend to remain high, which preventing any but a modest price improvement.

Price: The US cash price of lentils continued to slip to (US14.75-15.00 cents/pound by mid-December 1997, 20.25-21 cents in 1996); US grower prices were around 11.50 (17-17.50 a year ago). Lentil prices in Manitoba, in late November 1998 were in the 18-20 cent/pound area for #1 Estons (12-14 cents a year ago,12.5-14 in Nove[illegible]r 1996), with Lairds at 17.25-19 (13.25-14.5 cents in 1997,19.25-21.5 in 1996), with Speci[illegible] at 14.5-15.5 (11.45-12 cents, 12-12.7), and Richleas about 15.75-16.5 (13.05,18 cents). Reds (grown in Saskatchewan) were about 21-25 cents.

MILLET

Manitoba grew about 30,000 acres of millet, according to the 1991 Census (with no numbers yet out of the 1996 Census). Much of the millet area grown is for forage production. Little is harvested as seed, with some varieties susceptible to contamination from wild foxtail millet. Tame millet seed and millet sprays, however, are a major feed component for caged birds. Canada exported about 2,213 tonnes of millet during 1997 (1,103 tonnes in 1996).

Price: The mid to late-November 1998 price paid to producers for Red Proso millet was in the 8.2-8.25 cents/pound area (10.5 cent a year ago), with White Proso about 8 cents (7.2 cents), Crown millet about 7 cents (5 cents), Red Siberian about 11cents (14.5) (with Prairie Gold about 6 cents a year ago).

MUSTARDSEED

Mustardseed supplies appear to be still high in North America following the increases that occurred in 1997. While prices had halved between 1996 and 1997, they are lower still in 1998/99. US mustardseed plantings have expanded rapidly in recent years, and are pegged at

98,900 acres in 1998 (76,300 in 1997). Up to then, US planting in the 1990's had ranged from 15,300 (in 1992) to 19,400 (1991).

Canada's 1998 mustardseed production dropped slightly to 238,600 tonnes, after the increase of 1997 (243,300 tonnes in 1997, 230,800 in 1996). Manitoba grew only 3,400 tonnes (6,300 tonnes in 1997, 4,900 in 1996, 2,600 in 1995). The balance of the Canadian crop grown in Saskatchewan. Crop quality appears to be a problem in some areas of western Canada, with cleanliness (inseparable weeds and canola) an issue. (The industry recommends that tame mustardseed plantings follow canola only after 5 years.) In 1997, the US accounted for 57% or $10.2million of Manitoba's mustardseed exports, with the EU taking 37%, and Japan about 2%.

The nearby mustard milling industry has grown in recent years. The US Minn-Dak Growers Ltd. mills and deheats mustard at its Grand Forks plant. Some milling is currently done in eastern Canada, with much of the flour exported to the US or overseas. The Sakai Spice Canada Manufacturing plant in Lethbridge, Alberta, mills for the Japanese market. Mustardseed has a reasonably high protein level and can be used as a filler or emulsifier for meats, as well as a condiment. Mustardseed also has a high oil content of approximately 27% for yellow and 38-39% for the brown and oriental types. In Asia, the spicier mustards are valued as a flavouring for vegetable oils. (Reports indicate that some mustardseed millers now tend to buy by variety as well as by type.)

Price: Prices are lower again in 1998/99, and mid to late-November prices to Manitoba producers for #1 yellow mustardseed were about 16-18 cents/pound (18-22 cents/pound a year ago, 47 cents/pound in 1996). Producer prices for brown (grown mainly in Saskatchewan) were 16-17.25 (17-18 cents in 1997,18.5-20 in 1996). Oriental mustardseed was about 15.5-16 in Saskatchewan, about 17.5 in Manitoba (13.5-13.8, and 15-17). The lower prices are likely to further discourage some plantings in 1999, which could bring prices back toward the $440 or 20 cents/pound area for yellows.

SAFFLOWERSEED

US farmers harvested 186,920 tonnes of safflower in 1998 (177,715 in 1997). The US has increased plantings (303,000 acres in 1998, 228,000 in 1997, 222,000 acres in 1996). Canada produced an estimated 1,400 tonnes of safflower in 1998 (900 tonnes in Manitoba, and 500 tonnes in Saskatchewan. Although safflower is considered a premium oil, birdfeed appears to be the major use of much of the Canadian seed. The November 1998 producer price indication was 22 cents/pound (compared to $550/tonne or 25 cents/pound a year ago).

SUNFLOWERSEED

World sunseed production is put at 26.2 million tonnes (23.9), with larger crops in Canada, the US, Argentina, China and India, and smaller crops in Europe (France, Spain) and the Ukraine. The EU is importing from Russia and the Ukraine.

The 1998 US sunseed crop totalled 2.1 million tonnes (up from 1.7 million in 1997and 1.6 million 1996). The area of non-oils accounts for 21-22% of US acreage, with the balance being oil-types; oilseed production was up 49%, with non-oils up only 14%. The Minn-Dak Growers Ltd. processes birdseed, using oil sunseed, safflower, and millet, at its Dickinson plant, and processes confectionery sunseed at Donaldson, Minn. and Drayton N.D. plants.

Western Canada produced about 118,800 tonnes of sunseed in 1998 (65,100 in 1997).

Manitoba produces about 75% of the total crop (86,200 tonnes in 1998, 47,600 tonnes in 1997, 37,700 in 1996). Manitoba's crop was of good quality, and much of the non-oil seed was jumbo or larger sieve size which may help to bring delivered prices up (with a low portion being the small size that some birds prefer). At least 55-60% of the crop was non-oils, higher than the usual 50% in recent years. Longer seed types of non-oil sunseed may be at a premium to the shorter, rounder types. Saskatchewan grows the balance of the Canadian crop. Much of the Canadian crop is destined for human consumption or confectionery, or for birdfeed. The potential for marketing oilseed sun to US crushers only exists as long as the US is not using the Export Enhancement Program for sunfloweroil ("SOAP").

Price: The Manitoba price paid to producers for the oil-type, smaller, mainly black sunflowerseed in mid to late-November 1998 was 14-15.5 cents (14-14.75 cents a year ago), essentially for use in birdfeed. The Manitoba price for non-oil, confection-type, or striped sunseed was 20-22.5cents/pound (17-18 cents) pound for human consumption in mid to late-November, with a price of 19-21 cents (14-17) for birdfeed. With the good prices, some additional oilseed plantings in Canada and the US are likely for 1999, and that could put some mild pressure on sunseed prices with declines of perhaps $10 per tonne for the oils (1/2 cent), more for non-oils if sizing and US non-oil production returns to a normal distribution. Prices could dip in March, 1999, when Argentina's large crop hits the market.

TRITICALE:

Canada's triticale production nearly tripled in 1998 (85,300 tonnes vs 31,000 tonnes in 1997), according to recent Statistics Canada survey-based estimates. More than half of western Canada's crop is grown in Alberta (48,300 tonnes in 1998), much of it exported to the US. Smaller amounts are grown in Saskatchewan (27,900 tonnes) and Manitoba (9,100 tonnes). Triticale is a rye/wheat cross, and was developed mainly for milling uses. At least 21,000 acres of the triticale that is planted is used for forage, mainly in Alberta and Saskatchewan. Producers use it as a cover crop on newly-established forage fields, then hay or graze it. In mid-November 1998, triticale prices were quoted at $157-175/tonne, $4/bushel or better, although few if any transactions were reported. A year ago, triticale for seed, 85%+ germination, was priced around $4/bushel to the Manitoba producer.

MAJOR DATA SOURCES:

Statistics Canada, Canadian Grain Commission, Agriculture Canada, Manitoba Agriculture, United States Department of Agriculture, "Oil World"

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January, 1999

APPENDIX

WORLD TRADE AGREEMENTS

WTO meetings officially start in 1999, but preparatory talks were conducted through 1998. Among with topics for formal discussion will be the issues not fully addressed during the Uruguay Round, including the reductions of export subsidies and domestic support programs, improved market access, administration of tariff rate quotas (TRQ's), the use of safeguards for specific commodities, trade in biotech crops, and phyto-sanitary or non-tariff trade barriers. In the meantime, international discussions have been undertaken to harmonize policies on genetically or living modified organisms (GMO or LMO), drug and chemical registrations. An international biosafety working group met several times since October, 1997 and, by December, 1998, was to have negotiated and drafted rules for the export and import of LMO grains. (Douglas Mutch, from the Canada Grains Council, is a member of the working group.) The United Nations is also working on a Persistent Organic Pollutants Protocol (POP), a global chemicals protocol that is to come into effect by 2002.

US/CANADA TRADE

On December 22, 1998, the US Dept. of Commerce (DoC) initiated a countervailing investigation into live cattle exports by Canada and Mexico into the US. The US International Trade Commission (ITC) is investigating the perceived injury to the US from imports. One issue to be investigated as an alleged or potential subsidy to Canadian livestock is CWB control over barley exports! The US DoC will send questionnaires to the government of Canada to investigate a number of programs or issues, including the CWB, and the Net Income Stabilisation Account (NISA) program. (Current ITC complaints and calendars also include Canadian raspberries, sugar, and swine, http://www.usitc.gov)

December 4, 1998, US border blockages and Canada/US trade discussions resulted in Canada and the US signing an agreement of understanding (http://aceis.agr.ca/cb/trade/recorde.html) with Canada agreeing to accept shipments of grain from northern US states beginning January 1, 1999. Between September 16th and October 5th, northern state Highway Patrols had begun inspecting and inventorying Canadian trucks for content and destination, and at the S. Dakota order, trucks were "urged" to turn back. The coalition of northern governors halted the action on October 5th, pending Canada/US discussions. North Dakota advises, however, that the turnaround of overweight sealed trucks will continue.

The US acknowledges Canada as its largest trading partner, and Mexico as the 3rd largest. Both import large quantities of US grain and processed grain products, including corn for seed and corn and other feeds for domestic livestock and pets, including for animals purchased by US livestock slaughterhouses or processors. In 1998/99, Mexico is expected to import 4.25 million tonnes of US corn (4.5 million in 1997/98), well above the NAFTA minimum requirement of about 3 million tonnes. Imports of unprocessed US barley into Manitoba alone have totalled about 1000T/year in recent years, with US corn imports at 213,400T in 1995, 124,500T in 1996, and 114,300T in 1997. Access into Canadian grain markets has historically tended to be controlled more by price than by trade barriers, since import permits and transhipment access have long been available.

CANADA'S SAFETY NETS

Canada's current federal/provincial safety net framework agreements are currently being renegotiated. Federal and provincial governments are working to provide additional supports and/or loans to Canadian farmers during this period of low prices. The federal government has announced its intention to provide $900 million in multi-year farm income assistance. Provinces are assessing the program proposal to determine how individual provincial needs can be met. The Province of Manitoba has announced a $25 million loan program to address more immediate cash flow issues. (http://www.gov.mb.ca/chc/press/top/1998-12/dec2201.htm).

CHINA

China's grain 1998 harvest is estimated at 246 million tonnes (238 million in 1997 and 252 in 1996). Wheat production is down 10-15 million tonnes (to about 110 million), mainly because of the mid-1998 flooding across large northern areas, but coarse grain production is about 136 million tonnes (115 million). China required food and medical aid in devastated regions, and in the late fall, the US announced China's eligibility for wheat aid.

China is encouraging additional grain production through recent farm program reforms, and could become more of a major international competitor in the near future.

FORMER SOVIET UNION

The 1998 harvest in the former Soviet Union (FSU-15) was down sharply, after rebounding in 1997/98 following 2-3 poor years. Production in most areas, including the Ukraine, was down sharply, totaling about 59.4 million tonnes of wheat (82.1 million in 1997) and 43.6 million tonnes of coarse grains (70.6)! Russia's crops alone are considered to be the lowest in 50 years, with wheat and coarse grain production totaling less than 50 million tonnes, about half the level of 1992/93! Sugar beet and potato crops are also down.

The poor crops have necessitated aid requests from Russia for cereal grains, meat, and other foodstuffs from the US, the EU and Canada. Both the US and the EU have pledged large amounts of food, although the agreements were not finalized until late in 1998. Hopefully, much of the aid will reach Russia by the early months of 1999, when it will be critically needed. US aid has comprised of concessional, long-term loans, as well as grants, with US stipulations that the recipients be those most needy. The devaluation in the Russian ruble during the summer of 1998 has compounded Russia's repayment problems on prior sales. The restructuring of the economy is not going smoothly, and economic, labour, and political instability, including attempts by the Russian Parliament, the Duma, to reunite Russia and Byelorussia, are adding to uncertainties.

EUROPE

Over the previous 3 years, 1995/96, 1996/97, and 1997/98, the European Union (EU) exported less grain with the help of rebates or subsidies than it was allowed under the World Trade Agreement (or Uruguay Round, General Agreement on Tariffs and Trade). It therefore could legally carry over the right to use subsidies on 27.4 million tonnes of wheat and 11.8 million tonnes of coarse grain exports, in addition to any further, annual, allowable subsidies.

The European Commission's Common Agricultural Policy reform proposals, "Agenda 2000", recognize that EU intervention stocks and government expenditures will rise dramatically without substantial reforms, particularly with an expanded and increasingly productive production

area. However, implementation will not occur in 1999 and, according to the EC's own projections, those that are put in place for 2000 may be insufficient to prevent EU ending stocks from doubling between the end of 1997 (from 36.8 million tonnes) and the end of 2005.

EU forecasts at the end of September were very optimistic, assuming that: consumption will rise faster than production, EU wheat production will grow by less than 10 million tonnes, with about a 5 million tonne drop in coarse grain production and little change in rapeseed or sunseed, and that world trade will grow by 40-60 million tonnes. The EC also assumed that the world price of wheat will increase to between US$166-187/tonne by 2005, although subsequent, less optimistic outlooks would put the 2005 price closer to US$140, compared to US$100/tonne in late 1998. Export rebates amount to the difference between the higher domestic price and the world or export price. The proposed Agenda 2000 intervention price is therefore designed to be below the world price (at 95.35 ECU/tonne or US$115/tonne at a 1.2 exchange rate), so that the EU could cease the use of export rebates or subsidies.

The EU has been proposing a single per hectare (ha) aid payment for cereals and oilseeds, initially 66 ECU per reference tonne, which at the time (July 1997) would have increased wheat payments 20% and decreased oilseeds by 37%. (Since then cereal prices have fallen 45% and oilseeds have risen.) The "Blair House Agreement" between the EU and the US was a US attempt to prevent specific crop incentives, however, low wheat and high rapeseed prices are favouring oilseed production. Additionally, the EU has retained an exception to plant rapeseed for ethanol on the set-aside allowance and has an "area aid" for flaxseed that is about C$500/ha more than for rapeseed. The 1998 (and 1997) compensatory payment to European farmers for wheat is about C$217/acre or C$543/ha (304.3ECU/ha), while the payment for rapeseed is about C$360/acre or C$900/ha (503.75ECU/ha or 566 less adjustment penalty), with a set-aside compensation of about C$290/acre (405.5 ECU/ha). Agenda 2000 would currently increase the wheat payment to 369.6 ECU/ha, and decrease the rapeseed payment to 203.28 ECU/ha (a scenario considered disastrous to EU rapeseed if prices drop).

Without more farmer reliance on market prices, many in the EU have acknowledged that even a 25% set-aside could create large intervention stocks. The EU stated objective is a zero set-aside after the year 2000 (subject to annual EU negotiations), although the more likely set-aside, as used for EU stock calculation purposes, is 17.5% for 2000/01and beyond (10% for 1999/2000, 5% for 1998/99 and 1997/98).

MANITOBA CROP PRODUCTION SUMMARY, 1996 - 1998

	SEEDED AREA ('000AC)			HARVESTED AREA ('000AC)			YIELD/HARVESTED ACRE			PRODUCTION ('000TONNES)			
	1996	1997	1998	1996	1997	1998	1996	1997	1998	1996	1997	1998	98/97
							(BUSHELS/HARV.ACRE)						
WINTER WHEAT	25	40	85	25	40	85	48.1	42.5	47.1	32.7	46.3	108.9	235%
DURUM WHEAT	150	140	200	150	140	200	38.7	27.8	35.0	157.9	106.1	190.5	180%
OTHER WHEAT	4050	3700	2955	4025	3700	2945	38.2	31.8	36.4	4185.9	3197.8	2920.3	91%
TOTAL WHEATS	*4225*	*3880*	*3240*	*4200*	*3880*	*3230*	*38.3*	*31.7*	*36.6*	*4376.5*	*3350.2*	*3219.7*	*96%*
OATS	1050	800	1000	960	700	900	71.4	68.1	74.2	1056.4	735.6	1030.2	140%
BARLEY	1550	1400	1300	1550	1350	1240	62.6	57.3	60.4	2111.9	1685.2	1630.8	97%
RYE (1)	77	85	120	70	85	120	37.1	28.8	35.0	66.0	62.2	106.7	172%
MIXED GRAINS	35	30	20	25	20	10	56.0	50.0	50.2	28.6	20.4	10.2	50%
CORN, GRAIN	70	75	95	70	70	90	80.0	85.7	94.4	142.2	152.4	215.9	142%
FLAXSEED	570	660	700	565	660	690	25.0	21.2	21.0	358.2	355.6	368.3	104%
CANOLA/RAPESEED	1570	2370	2750	1550	2350	2710	30.4	28.1	29.0	1068.2	1496.9	1781.5	119%
BUCKWHEAT	30	25	30	30	25	30	23.3	18.0	16.7	15.2	9.8	10.9	111%
DRY PEAS	145	205	260	140	205	255	34.6	32.0	32.2	132.0	178.3	223.2	125%
TRITICALE	2	2	10	1	2	8	18.2	35.4	35.8	1.0	1.8	9.1	506%
							(POUNDS/HARV. ACRE)						
SUNFLOWERSEED	63	85	125	60	85	125	1385	1235	1520	37.7	47.6	86.2	181%
CANARYSEED	70	20	50	65	20	45	1143	1014	1220	33.7	9.2	24.9	271%
DRY BEANS, WT.NAVY	33	50	50	33	50	50	1276	1402	1601	19.1	31.8	36.3	114%
DRY BEANS, COL.	32	30	50	32	30	50	1343	1168	1578	19.5	15.9	35.8	225%
TOTAL BEANS	*65*	*80*	*100*	*65*	*80*	*100*	*1309*	*1314*	*1590*	*38.6*	*47.7*	*72.1*	*151%*
FABABEANS	4	5	10	4	5	10	2976	1499	2271	5.4	3.4	10.3	303%
LENTILS	40	8	15	40	8	13	1157	1461	1001	21.0	5.3	5.9	111%
MUSTARDSEED	11	17	10	11	17	10	982	817	750	4.9	6.3	3.4	54%
TOTAL GRAINS	*7007*	*6270*	*5775*	*6875*	*6105*	*5590*				*7782*	*6006*	*6214*	*103%*
TOTAL OILSEEDS	*2203*	*3115*	*3575*	*2178*	*3073*	*3463*				*1464*	*1900*	*2236*	*118%*
TOTAL SPECIALS	*367*	*362*	*485*	*356*	*362*	*471*				*252*	*262*	*360*	*137%*
TOTAL	*9577*	*9747*	*9835*	*9409*	*9540*	*9524*				*9498*	*8168*	*8809*	*108%*
							(TONNES/HARV. ACRE)						
FODDER CORN	30	35	40	30	30	40	9.1	8.3	11.3	272.2	249.5	453.6	182%
TAME HAY	1913	1900	1880	1913	1900	1880	1.5	0.8	1.5	2903.0	1451.5	2766.9	191%
SUMMERFALLOW	15395	14070	13520										
IMPROVED PASTURE	700	700	800										

DATASOURCE: STATS CANADA, AUTHOR'S ESTIMATES (1) AFTER WINTERKILL, n/a = not available

CANADA CROP PRODUCTION SUMMARY, 1996 - 1998

	SEEDED AREA ('000AC)			HARVESTED AREA ('000AC)			YIELD/HARVESTED ACRE			PRODUCTION ('000TONNES)			
	1996	1997	1998	1996	1997	1998	1996	1997	1998	1996	1997	1998	98/97
							(BUSHELS/HARV.ACRE)						
WINTER WHEAT	968	623	957	948	622	957	39.8	54.1	56.7	1027.9	915.3	1475.8	161%
DURUM WHEAT	5100	5515	7250	5100	5465	7220	33.3	29.3	31.0	4626.6	4351.7	6082.7	140%
OTHER WHEAT	24670	22266	18614	24254	22108	18433	36.6	31.6	33.6	24146.9	19013.3	16834.7	89%
TOTAL WHEATS	***30738***	***28403***	***26820***	***30302***	***28195***	***26609***	***36.1***	***31.6***	***33.7***	***29801.4***	***24280.3***	***24393.2***	***100%***
OATS	5091	4631	5097	4161	3703	3933	68.0	61.0	65.2	4361.1	3484.7	3957.5	114%
BARLEY	**12943**	**12404**	**11439**	**12078**	**11614**	**10549**	**59.2**	**53.5**	**55.3**	**15562.0**	**13527.3**	**12698.7**	**94%**
RYE (1)	460	417	564	400	401	503	30.5	31.5	31.2	309.4	320.0	398.1	124%
MIXED GRAINS	721	766	680	524	539	483	58.6	59.0	59.0	581.9	602.8	540.0	90%
GRAIN CORN	2794	2594	2784	2694	2577	2764	110.2	109.5	127.0	7541.7	7168.8	8912.4	124%
FLAXSEED (2)	1465	1820	2170	1420	1820	2160	23.6	19.4	20.2	851.0	895.4	1106.2	124%
CANOLA/RAPESEED	**8748**	**12123**	**13535**	**8527**	**12033**	**13395**	**26.2**	**23.4**	**25.0**	**5062.3**	**6393.1**	**7587.8**	**119%**
SOYBEANS (3)	2167	2617	2423	2125	2612	2422	37.5	38.4	41.5	2169.5	2732.0	2736.6	100%
BUCKWHEAT	44	36	37	42	34	36	24.0	20.8	19.0	22.2	15.5	14.8	95%
DRY PEAS	1345	2097	2680	1285	2095	2665	33.5	30.9	32.2	1173.0	1762.2	2336.9	133%
TRITICALE	64	57	140	36	37	88	38.5	*33.0*	*38.2*	35.2	31.0	85.3	275%
							(POUNDS/HARV.ACRE)						
SUNFLOWERSEED	90	125	170	87	125	170	1391	1148	1450	54.9	65.1	111.8	172%
CANARYSEED	615	280	520	580	280	515	1082	905	1007	284.6	115.0	235.3	205%
DRY BEANS,	109	119	99	102	119	99	1323	1537	1654	61.2	82.6	73.9	89%
DRY BEANS, COL.	107	99	134	105	99	134	1513	1742	1835	71.8	77.9	111.2	143%
FABABEANS	7	6	14	7	6	14	1826	1584	2157	5.5	4.3	13.7	318%
LENTILS	750	813	935	750	813	918	1183	1027	1152	402.5	378.7	479.7	127%
MUSTARDSEED	591	722	700	576	722	690	883	743	762	230.8	243.3	238.6	98%
SAFFLOWER	2	0	3	2	0	3	772		1029	0.7	0.0	1.4	
TOTAL GRAINS	***52746***	***49215***	***47384***	***50158***	***47028***	***44840***				***58009***	***49221***	***49575***	101%
TOTAL OILSEEDS	***12444***	***16616***	***18268***	***12108***	***16501***	***18065***				***8118***	***10052***	***11516***	115%
TOTAL SPECIALS	***3667***	***4292***	***4245***	***3606***	***4285***	***4216***				***2903***	***3452***	***3596***	104%
TOTAL	***68743***	***70029***	***70809***	***65697***	***67723***	***68014***				***68362***	***61940***	***64597***	104%
							(TONNES/HARV. ACRE)						
FODDER CORN	439	501	495	438	496	494	12.3	10.9	13.0	5375.4	5421.9	6425.3	119%
TAME HAY	15804	15732	15920	15804	15732	15048	1.8	1.3	1.4	28025.0	21001.1	21436.6	102%
SUMMERFALLOW	15395	14070	13520	15395	14070	13520							
TOTAL	68193	69327	70134	65089	67023	67354				68202.6	61774.1	64467.9	104%

NOTES: (1) RYE =AFTER WINTERKILL; (2) SOLIN EXCL (3) EASTERN CANADA ONLY; MAY NOT ADD DUE TO ROUNDING; DATASOURCE: STATS CANADA, AUTH. EST.

CANADIAN WHEAT BOARD PAYMENTS, BASIS IN-STORE PORT (THUNDER BAY, B.C., OR ST. LAWRENCE)

($/Tonne) ($/Bushel)	1990/91 Total TB/BC	1991/92 Total TB/BC	1992/93 Total TB/BC	1993/94 Total TB/BC	1994/95 Total TB/BC	1995/96 Total ST.L./BC	1996/97 Total ST.L./BC	1997/98 Total ST.L./BC	1998/99 "PRO" ST.L./BC DEC/98	1998/99 "INITIAL" ST.L./BC DEC/98	1998/99 "TOP-UP" (PRO. INITIAL)
RED SPRING WHEAT											
1CW RED SPRING 15%	-	-	-	-	-	288.21	242.02	226.24		186.00	
						7.84	6.59	6.16		5.06	
1CWRS 14.5%	139.21	143.75	191.36	228.02	236.15	282.19	236.18	216.61		179.00	
	3.79	3.91	5.21	6.21	6.43	7.68	6.43	5.90		4.87	
1CWRS 14%	-	-	-	-	-	276.87	230.45	216.68		172.00	
						7.54	6.27	5.90		4.68	
1CWRS 13.5%	137.21	137.96	166.74	193.99	210.38	271.75	224.88	211.68	216.00	166.00	50.00
	3.73	3.75	4.54	5.28	5.73	7.40	6.12	5.76	5.88	4.52	1.36
1CWRS 13%	-	-	-	-	-	267.83	220.42	206.74		160.00	
						7.29	6.00	5.63		4.35	
1CWRS 12.5%	-	-	-	-	-	263.60	216.54	201.73		155.00	
						7.17	5.89	5.49		4.22	
1CWRS 12%	-	-	-	-	-	259.61	212.74	196.49	202.00	150.00	52.00
						7.07	5.79	5.35	5.50	4.08	1.42
1CW RED SPRING	135.00	134.14	156.82	164.01	195.59	254.16	208.20	190.76	195.00	145.00	50.00
	3.67	3.65	4.27	4.46	5.32	6.92	5.67	5.19	5.31	3.95	1.36
2CWRS 15%	-	-	-	-	-	282.87	237.67	222.67		179.00	
						7.70	6.47	6.06		4.87	
2CWRS 14.5%	-	-	-	-	-	276.49	231.98	217.93		173.00	
						7.52	6.31	5.93		4.71	
2CWRS 14%	-	-	-	-	-	271.25	226.16	213.07		167.00	
						7.38	6.15	5.80		4.54	
2CWRS 13.5%	130.21	131.28	158.14	185.94	203.57	266.20	220.60	208.00	213.00	162.00	51.00
	3.54	3.57	4.30	5.06	5.54	7.24	6.00	5.66	5.80	4.41	1.39
2CWRS 13%	-	-	-	-	-	262.25	216.11	203.24		157.00	
						7.14	5.88	5.53		4.27	
2CWRS 12.5%	-	-	-	-	-	258.39	212.21	198.17		152.00	
						7.03	5.78	5.39		4.14	
2CWRS 12%	-	-	-	-	-	254.60	208.77	193.25		147.00	
						6.93	5.68	5.26		4.00	
2CWRS	129.21	127.22	149.99	155.46	189.45	251.17	204.71	188.12	192.00	142.00	50.00
	3.52	3.46	4.08	4.23	5.16	6.84	5.57	5.12	5.23	3.86	1.36
3CWRS 13%	-	-	-	-	-	254.44	199.74	179.54		136.00	
						6.92	5.44	4.89		3.70	
3CWRS	**117.21**	**122.67**	**145.19**	**142.82**	**180.11**	**247.60**	**196.79**	**177.21**	**181.00**	**132.00**	**49.00**
	3.19	3.34	3.95	3.89	4.90	6.74	5.36	4.82	4.93	3.59	1.33
1CW Ex. Strong, 12.5% (Utility)	-	-	-	-	-	256.57	211.99	192.50		145.00	
						6.98	5.77	5.24		3.95	
1CW Ex. Strong (Utility)	121.21	130.37	159.84	162.01	193.21	256.57	210.58	191.23	193.00	143.00	50.00
	3.30	3.55	4.35	4.41	5.26	6.98	5.73	5.20	5.25	3.89	1.36
2CW Ex. Strong, 12.5% (Utility)	-	-	-	-	-	-	209.51	190.68		143.00	
							5.70	5.19		3.89	
2CW Ex. Strong (Utility)	104.21	121.37	149.04	154.61	186.55	253.51	208.11	189.42		142.00	
	2.84	3.30	4.06	4.21	5.08	6.90	5.66	5.16		3.86	
Canada Feed	95.00	110.11	120.74	114.39	153.87	217.02	156.99	140.99	126.00	105.00	21.00
	2.59	3.00	3.29	3.11	4.19	5.91	4.27	3.84	3.43	2.86	0.57
1C PRAIRIE SPRING (Red)	113.21	121.55	145.41	144.32	178.93	246.23	194.90	172.05	166.00	130.00	36.00
	3.08	3.31	3.96	3.93	4.87	6.70	5.30	4.68	4.52	3.54	0.98
2CPS (Red)	111.21	119.55	143.41	140.32	176.72	244.25	193.81	170.99		128.00	
	3.03	3.25	3.90	3.82	4.81	6.65	5.27	4.65		3.48	
1CPS (White)	-	126.15	152.32	143.32	180.17	245.36	195.35	171.86	156.00	126.00	30.00
		3.43	4.15	3.90	4.90	6.68	5.32	4.68	4.25	3.43	0.82

CANADIAN WHEAT BOARD PAYMENTS, IN-STORE PORT (CONTINUED)

	1990/91 Total	1991/92 Total	1992/93 Total	1993/94 Total	1994/95 Total	1995/96 Total	1996/97 Total	1997/98 Total	1998/99 "PRO"	1998/99 "INITIAL"	1998/99 "TOP-UP"
RED WINTER WHEAT											
1CW RED WINTER, 11.5%	-	-	-	-	-	254.76	203.38	182.50		136.00	
						6.93	5.54	4.97		3.76	
1CWRW	116.21	130.28	154.96	146.82	185.29	251.71	201.81	181.13	179.00	136.00	43.00
	3.22	3.55	4.22	4.05	5.04	6.85	5.49	4.93	4.87	3.70	1.17
2CWRW, 11.5%	-	-	-	-	-	250.79	201.70	181.50		135.00	
						6.83	5.49	4.94		3.67	
2CWRW	116.21	128.14	155.38	144.82	180.86	247.85	200.12	180.13		133.00	
	3.16	3.49	4.23	3.94	4.92	6.75	5.45	4.90		3.62	
3CWRW	102.00	114.66	159.39	114.39	153.86	n/a	n/a	n/a		n/a	
	2.78	3.12	4.34	3.11	4.19						
SOFT WHITE SPRING WHEAT											
SEL. 1CW SOFT WHITE SPRING	-	-	-	-	-	249.75	199.17	172.58		123.00	
						6.80	5.42	4.70		3.35	
1CWSWS	117.00	129.67	154.96	132.88	179.47	245.25	197.16	171.33	153.00	122.00	31.00
	3.18	3.53	4.22	3.62	4.88	6.67	5.37	4.66	4.16	3.32	0.84
SEL. 2CWSWS	-	-	-	-	-	246.35	197.09	n/a		122.00	
						6.70	5.36			3.32	
2CWSWS	114.00	126.67	151.66	129.68	177.43	242.25	194.53	169.47		121.00	
	3.10	3.45	4.13	3.53	4.83	6.59	5.29	4.61		3.29	
3CWSWS	103.00	114.66	127.63	114.39	154.86	217.02	156.99	140.99		105.00	
	2.80	3.12	3.47	3.11	4.21	5.91	4.27	3.84		2.86	
AMBER DURUM WHEAT											
1CWAD,14%	-	-	-	-	-	341.18	274.23	293.34		170.00	
						9.29	7.46	7.98		4.63	
1CWAD,13.5%	-	-	-	-	-	334.32	269.35	289.98		165.00	
						9.10	7.33	7.89		4.49	
1CWAD,13%	-	-	-	252.41	297.51	329.82	264.66	286.63	198.00	160.00	38.00
				6.87	8.10	8.98	7.20	7.80	5.39	4.35	1.03
1CWAD,12.5%	-	-	-	-	-	311.69	259.76	283.28		155.00	
						8.48	7.07	7.71		4.22	
1CWAD	125.00	135.32	158.36	235.36	271.00	286.13	249.91	278.21	189.00	150.00	39.00
	3.40	3.68	4.31	6.41	7.38	7.79	6.80	7.57	5.14	4.08	1.06
2CWAD,14%	-	-	-	-	-	331.97	263.49	286.92		162.00	
						9.03	7.17	7.81		4.41	
2CWAD,13.5%	-	-	-	-	-	326.59	258.61	283.14		157.00	
						8.89	7.04	7.71		4.27	
2CWAD,13%	-	-	-	245.18	266.50	320.94	253.92	279.36		152.00	
				6.67	7.25	8.73	6.91	7.60		4.14	
2CWAD,12.5%	-	-	-	-	-	302.41	249.65	276.10		147.00	
						8.23	6.79	7.51		4.00	
2CWAD	122.00	130.37	153.61	226.88	261.55	277.55	241.40	271.07	181.00	142.00	39.00
	3.32	3.55	4.18	6.17	7.12	7.55	6.57	7.38	4.93	3.86	1.06
3CWAD,13%							236.07	263.96		135.00	
							6.42	7.18		3.67	
3CWAD	118.00	125.40	147.85	204.33	243.30	265.68	231.10	260.92	169.00	132.00	37.00
	3.21	3.41	4.02	5.56	6.62	7.23	6.29	7.10	4.60	3.59	1.01
4CWAD	102.00	117.88	126.16	170.42	209.59	238.02	204.74	235.57		115.00	
	2.76	3.21	3.43	4.64	5.70	6.48	5.57	6.41		3.13	
5CWAD	95.00	110.11	112.34	120.20	158.11	219.82	156.99	145.39		105.00	
	2.59	3.00	3.06	3.27	4.30	5.98	4.27	3.96		2.86	

CANADIAN WHEAT BOARD PAYMENTS, IN-STORE PORT (CONTINUED)											
	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1998/99	1998/99
	Total	Total	Total	Total	Total	Total	Total	Total	"PRO"	"INITIAL"	"TOP-UP"
BARLEY											
EXTRA 1CW	-	-	-	103.93	105.83	209.50	154.50	124.02		103.00	
				2.26	*2.30*	*4.56*	*3.36*	*2.70*		*2.24*	
1CW (2CW2R/	90.00	107.59	102.46	99.94	101.94	205.49	150.97	121.02	140.00	100.00	40.00
2CW6R)	*1.96*	*2.34*	*2.23*	*2.18*	*2.22*	*4.47*	*3.29*	*0.00*	*3.05*	*2.18*	*0.87*
2CW (1Feed)	87.00	104.59	99.46	94.01	96.98	199.72	144.94	115.51		93.00	
	1.89	*2.28*	*2.17*	*2.05*	*2.11*	*4.35*	*3.16*	*2.51*		*2.02*	
STD.HULLESS	-	-	-	113.44	107.69	212.41	155.99	126.02		105.00	
				2.47	*2.34*	*4.62*	*3.40*	*2.74*		*2.29*	
DESIGNATED BARLEY, 2-ROW											
SSCW2R	154.79	142.00	160.80	134.62	177.17	248.99	228.82	196.32	166.00	148.00	18.00
(1CW2R)	*3.37*	*3.09*	*3.50*	*2.93*	*3.86*	*5.42*	*4.98*	*4.27*	*3.61*	*3.22*	*0.39*
SCW2R	152.29	139.50	158.30	132.12	174.67	246.49	226.32	193.82		144.00	
(1Feed 2R)	*3.32*	*3.04*	*3.45*	*2.88*	*3.80*	*5.37*	*4.93*	*4.22*		*3.14*	
SAMPLE SCW2R	149.79	n/a	155.80	129.62	172.17	243.99	223.82	191.32		140.00	
(2Feed)	*3.26*		*3.39*	*2.82*	*3.75*	*5.31*	*4.87*	*4.17*		*3.05*	
SELECT 2R HULLESS	-	-	-	132.12	163.80	233.46	213.84	n/a		136.00	
				2.88	*3.57*	*5.08*	*4.66*			*2.96*	
DESIGNATED BARLEY, 6-ROW											
SSCW6R	142.79	126.93	143.90	122.68	158.64	227.31	195.26	176.54	154.00	132.00	22.00
(1CW6R)	*3.11*	*2.76*	*3.13*	*2.67*	*3.45*	*4.95*	*4.25*	*3.84*	*3.35*	*2.87*	*0.48*
SCW6R	140.29	124.43	141.40	120.39	156.14	224.81	192.76	174.04		128.00	
(1Feed 6R)	*3.05*	*2.71*	*3.08*	*2.62*	*3.40*	*4.89*	*4.20*	*3.79*		*2.79*	
SAMPLE SCW6R	137.79	n/a	138.90	117.26	153.64	222.31	190.26	171.54		124.00	
(2Feed)	*3.00*		*3.02*	*2.55*	*3.35*	*4.84*	*4.14*	*3.73*		*2.70*	
SELECT 6R HULLESS	-	-	-	112.00	145.27	n/a	n/a	166.74		122.00	
				2.44	*3.16*			*3.63*		*2.66*	
DATASOURCE: CANADIAN WHEAT BOARD, AUTHOR'S ESTIMATES											